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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/846,658	05/01/1997	JOHN ROBERT ADAIR	CARP-0057	9631
34132	7590	07/12/2004	EXAMINER	
COZEN O'CONNOR, P.C. 1900 MARKET STREET PHILADELPHIA, PA 19103-3508			DAVIS, MINH TAM B	
			ART UNIT	PAPER NUMBER
			1642	
DATE MAILED: 07/12/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 08/846,658	Applicant(s) ADAIR ET AL.	
	Examiner MINH-TAM DAVIS	Art Unit 1642	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 24-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 24-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Accordingly, claims 24-31 are being examined.

The following are the remaining rejections.

REJECTION UNDER 35 USC 102 (e)

Rejection under 35 USC 102(e) of claims 24-31 pertaining to anticipation by Queen et al remains for reasons already of record in paper of 08/21/03.

Applicant argues that if the first reference to CDRs in claim 1 of Queen et al means either Kabat or Chothia, then claim 1 is clearly indefinite.

Applicant argues that the first limitation of claim 1 does not recite "Kabat or Chothia CDRs" but merely "CDRs". Applicant argues that the CDRs of Kabat and Chothia is not the same, and that the Chothia CDRs are smaller than the Kabat CDRs and are not co-extensive therewith, e.g. the first CDR of the heavy chain of Kabat includes residues **31-35**; for Chothia, the first hypervariable loop includes residues **26-32**. Applicant argues that dependent on which definition is used, a product having changes at residues 26-30, may or may not infringe. Applicant argues that similarly, a product having changes at residues 33-35 may or may not infringe. Applicant argues that further, one cannot tell whether the additional limitation of claim 1 - i.e., "adjacent a CDR in the immunoglobulin sequence" -- is satisfied because the answer will change depending upon the limits of the CDRs.

In addition, Applicant argues that the Office's present argument seems contrary to its previous arguments and contrived to respond to Applicants' arguments that an interpretation that CDRS includes both is clearly not supported. In the prior Office Action, the Office asserted that

"one of ordinary skill in the art would have recognized that CDR'S as taught by Queen et al would **include also** CDR'S as defined by Chothia et al, **besides CDR'S as defined by Kabat et al**, regardless of whether the rest of the specification discloses as examples Kabat's CDR's".

(see Office Action dated as mailed March 26, 2003, page 4, emphasis added.)

Applicants argues that Queen et al is not entitled to a priority date earlier than the date in which the recitation requiring that the residue(s) to be changed to donor be "outside the Kabat and Chothia CDRS" first appeared because there was no support for this recitation earlier. Applicant argues that indeed, even in the issued Queen et al patent, changes within the "Chothia" CDR are clearly viewed as residue changes "outside the CDRs" (See, for example, the discussion of Category 4 of the protocol for selecting amino acids to change at col. 14, lines 43 et seq. of Queen et al and the list of residue changes for the Fd138-80, M195, and mik-beta 1 antibodies of Table 1, cols. 43-44, of Queen et al). Applicant argues that residues 27, 29, and 30 are all listed as satisfying Category 4 in Table 1, and that residues 27, 29, and 30 are all within the "Chothia" CDR, i.e., 26-32. Applicant argues that category 4, however, is defined as follows: "[a] 3-dimensional model, typically of the original donor antibody, shows that

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certain amino acids outside of the CDR'S . . . have a good probability of interacting with amino acids in the CDRS by hydrogen bonding." (Queen et al, col. 14, lines 43-47, emphasis added.) Applicant argues that residues 27, 29, and 30 are identified as residues within Category 4 and, thus, are clearly considered to be residues outside the CDRS.

Concerning the recited Office action of March, 26, 2003, page 4, the Examiner intended to mean that one can interpret CDRs as either Kabat or Chothia CDRs. The Examiner apologizes for any confusion incurred.

Applicant's arguments set forth in paper of 03/29/04 have been considered but are not deemed to be persuasive for the following reasons:

Claim 1 is not indefinite based on the interpretation of the '975 specification, and the 102(e) rejection remains. Although the first line of claim 1 does not recite "Kabat or Chothia CDRs", but only "CDRs", one would understand that CDRs recited in claim 1 could mean either Kabat or Chothia CDRs, in view of the incorporation of reference of CDRs defined as the hypervariable regions taught by Chothia et al and CDRs as defined by Kabat et al in the parent application 07/290975, p.8, last paragraph, bridging p.9).

Further, dependent which of the definition of CDRs, Kabat or Chothia, is used in the humanized antibody, it would be routine in the art to determine which amino acids constitute the framework, or which amino acids are outside of or adjacent to the CDRs, since the amino acids of the Kabat or Chothia CDRs are well known in the art. Further,

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the amino acid residues cited by Queen et al are only examples based on Kabat CDRs, and it is routine in the art to adjust the amino acids when based on Chothia CDRs.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

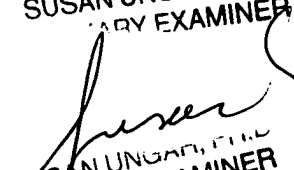
Any inquiry concerning this communication or earlier communications from the examiner should be directed to MINH-TAM DAVIS whose telephone number is 571-272-0830. The examiner can normally be reached on 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JEFFREY SIEW can be reached on 571-272-0787. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MINH TAM DAVIS
July 02, 2004

SUSAN UNGAR, PH.D.
PRIMARY EXAMINER

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